Major Industrial
Permit No.: MT0030457

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 *et seq.*,

Fidelity Exploration and Production Company

is authorized to discharge from its **Tongue River Project**

located at **approximately Township 9S, Range 40 E, Section 33, near Decker Montana**

to receiving waters named, **Tongue River**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit. The wasteload allocation specified herein support and serve to define the total maximum daily load for affected receiving water.

This permit shall become effective: April 1, 2006.

This permit and the authorization to discharge shall expire at midnight: March 31, 2011.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

/s/ Bonnie Lovelace
Bonnie Lovelace, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: February 3, 2006

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I. EFFLUENT LIMITATIONS, CONDITIONS AND MONITORING REQUIREMENTS

A. Description of Discharge Points and Mixing Zone

The authorization to discharge provided under this permit is limited to those outfalls specially designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

Outfall	Description
001	Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 16.527") N latitude, (106º 52' 18.761") W longitude. Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (32) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature. Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.
002	Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 57.252") N latitude, (106º 52' 27.082") W longitude. Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (22) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature. Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.
003	Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 0.987") N latitude, (106º 52' 22.543") W longitude. Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (22)

feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

004 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 6.895") N latitude, (106º 51' 58.328") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (20) feet downstream and equipped with a bank to bank effluent diffuser for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

005 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59 54.063") N latitude, (106º 51' 58.328") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (32) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

006 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 8.994") N latitude, (106º 51' 16.113") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (20) feet downstream and equipped with a bank to bank effluent diffuser for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

007 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 14.614") N latitude, (106º 51' 9.458") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (47) feet downstream; and (15) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

008 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 55.131") N latitude, (106º 52' 46.093") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (20) feet downstream and equipped with a bank to bank effluent diffuser for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

009 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 45.940") N latitude, (106º 52' 47.284") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (39) feet downstream; and (15) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

010 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 1.647") N latitude, (106º 52' 9.140") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (22)

feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

011 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 46.813") N latitude, (106º 50' 51.658") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (39) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

012 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 49.609") N latitude, (106º 49' 25.549") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (47) feet downstream; and (15) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

013 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 9.496") N latitude, (106º 49' 50.358") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (39) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

014 Location: At the end of the pipe, discharging into the Tongue River, located at (44º 59' 48.738") N latitude, (106º 50' 49.855") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (39) feet downstream; and (10) feet in width for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

016 Location: At the end of the pipe, discharging into the Tongue River, located at (45º 0' 46.074") N latitude, (106º 49' 7.635") W longitude.

Mixing Zone: The maximum extent of the chronic mixing zone in the named receiving waters is as follows: (20) feet downstream and equipped with a bank to bank effluent diffuser for the following parameters: Ammonia, Fluoride, Electrical Conductivity, Sodium Adsorption Ratio and Temperature.

Treatment Works: Discharge consists of untreated produced water from coal bed natural gas development.

B. Effluent Limitations

Outfalls 001 through 014, and 016

Beginning on the effective date of this permit and lasting through the term of the permit, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below:

Effluent Limitation [(1)]				
Parameter	Units	Average Monthly	Daily Maximum	Instantaneous Maximum
Total Suspended Solids	mg/L	25	30	NA

Footnotes:

[(1)] See the definitions in Part V. of the permit for explanation of terms.

Between November 1 and February 28, the total flows discharged from Outfall 001- 014 and Outfall 016 shall not exceed 2,500 gallons per minute (gpm).

Between March 1 and June 30, the total flows discharged from Outfall 001- 014 and Outfall 016 shall not exceed 2,375 gallons per minute (gpm).

Between July 1 and October 31, the total flows discharged from Outfall 001- 014 and Outfall 016 shall not exceed 1,600 gallons per minute (gpm). Additional flow restrictions will be applicable during this seasonal period. Total discharges to the upper reach of the Tongue River will be limited to 1,000 gpm. The remainder of permitted flows may be discharged below the final Wyoming border.

Effluent pH shall remain between 6.5 and 9.0 standard units. For compliance purposes, any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

The effluent is composed entirely of produced water from CBNG development; no sewage, industrial, or other wastes may be discharged from the collection system.

The instantaneous maximum limitation for oil & grease in any grab sample shall not exceed 10 mg/L.

There shall be no discharge which causes visible oil sheen in the receiving stream.

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

There shall be no acute toxicity in the effluent discharged by the facility.

Discharge restrictions due to low flow - When daily stream flow values are less than 35 cubic feet per second (cfs) as recorded at USGS gauging station 06306300 (Tongue River at State Line near Decker), the permittee shall conduct daily instream monitoring of specific conductance at location DWS-A. The permittee shall cease discharging to the Tongue River if the measured instream specific conductance exceeds the following values on any on two consecutive calendar days:

November 1 through March 1:	2,500 µS/cm
March 2 through October 31:	1,500 µS/cm

In the event the permittee ceases discharge due to these conditions, discharges cannot recommence until the flow in the Tongue River at the gauge identified above exceeds 35 cfs.

C. Monitoring Requirements

Outfalls 001 through 014 and 016

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge or overflow occurred.

Effluent Monitoring Requirements			
Parameter	Frequency (1)	Sample Type (2)	Minimum Level
Effluent Flow Rate, gpm	Continuous	Instantaneous (3)	(4)
pH, SU	Weekly	Instantaneous	0.1
Temperature, °F	Weekly	Instantaneous	1
Total Suspended Solids, mg/L	Monthly	Grab	10
Specific Conductivity, µS/cm	Weekly	Instantaneous	10
Total Dissolved Solids, mg/L	Weekly	Grab	10
Sodium, mg/L	Monthly	Grab	1.
Calcium, mg/L	Monthly	Grab	1.
Magnesium, mg/L	Monthly	Grab	1.
Sodium Absorption Ratio	Monthly	Calculated	0.1
Ammonia, as N, mg/L	Monthly	Grab	0.05
Fluoride, mg/L	Monthly	Grab	0.05
Total Nitrogen, mg/L (5)	Monthly	Calculate	0.1
Nitrite + Nitrate, as N, mg/L	Monthly	Grab	0.05
Kjeldahl Nitrogen, Total, as N, mg/L	Monthly	Grab	0.1
Phosphorous, Total, mg/L	Monthly	Grab	0.01
Oil & Grease, mg/L	Quarterly	Grab	1
Whole Effluent Toxicity, acute	Quarterly	Grab	NA

Footnotes:
1. Refers to the frequency of observation or measurement.
2. See the definitions in Part V. of the permit.
3. Requires the use of recording device or totalizing device.
4. Part II.B requires that flow measurements must be within 10% of the measured flow.
5. Total nitrogen is sum of Kjeldhl nitrogen and nitrite plus nitrate nitrogen.
6. Based on comments received, two additional quarterly WET sampling and analysis will be required. For outfalls 001 through 011 and 014(except 004) one quarterly WET test will be required. The outfall sampled during the monitoring quarter will be selected on a rotational basis. For outfalls 012, 013, and 016, one outfall will be sampled and tested quarterly on a rotational basis. Outfall 004 will be sampled and tested quarterly.

Whole Effluent Toxicity (WET) Testing Requirements – Acute Toxicity

Starting in the first calendar quarter following the effective date of the permit, the permittee shall, at least once each quarter conduct an acute static replacement toxicity test on a composite/grab sample of the effluent. Testing will employ two species per quarter and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water. Samples shall be collected on a two day progression; i.e., if the first yearly sample is on a Monday, the second yearly sample shall be on a Wednesday, etc. Saturdays, Sundays and Holidays will be skipped in the progression.

The replacement static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms, EPA-600/4-90/027 and the "Region VIII EPA NPDES Acute Test Conditions-Static Renewal Whole Effluent Toxicity". The permittee shall conduct acute 48-hour static renewal toxicity tests using *Ceriodaphnia dubia* and fathead minnow (*Pimephales promelas*).

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the Department.

If no acute toxicity is observed for four consecutive calendar quarters, testing may be reduced to alternating one species quarterly testing.

The quarterly results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28th with the remaining quarterly reports submitted with the June, September, and December DMR's). The format for the laboratory report shall be consistent with the latest revision of Region VIII Guidance for Acute Whole Effluent Reporting, and shall include all chemical and physical data as specified.

D. Special Conditions

1. Supplemental Effluent Monitoring

The permittee shall conduct supplemental monitoring of representative outfalls in accordance with the Supplemental Monitoring Plan, approved by the Department pursuant to Part I.E.1 of this permit.

Supplemental Effluent Monitoring			
Parameter	Frequency (1)	Sample Type (2)	Minimum Level
Arsenic, Total Recoverable, mg/L	Quarterly	Grab	0.001
Mercury, Total Recoverable, mg/L	Quarterly	Grab	0.0001
Radium, Total, pCi/L	Quarterly	Grab	0.1
Biochemical Oxygen Demand, mg/L	Semi Annual	Composite	5
Chemical Oxygen Demand, mg/L	Semi Annual	Composite	10
Total Organic Carbon, mg/L	Semi Annual	Composite	0.5
Radioactivity, Alpha-Total, pCi/L	Semi Annual	Composite	1
Radioactivity, Beta-Total, pCi/L	Semi Annual	Composite	1
Aluminum, Dissolved, mg/L	Semi Annual	Composite	0.01
Barium, Total Recoverable, mg/L	Semi Annual	Composite	0.01
Boron, Total Recoverable, mg/L	Semi Annual	Composite	0.01
Copper, Total Recoverable, mg/L	Semi Annual	Composite	0.001
Iron, Dissolved, mg/L	Semi Annual	Composite	0.01
Iron, Total Recoverable, mg/L	Semi Annual	Composite	0.01
Lead, Total Recoverable, mg/L	Semi Annual	Composite	0.001
Strontium, Total, mg/L	Semi Annual	Composite	0.1
Cadmium, Total Recoverable, mg/L	Semi Annual	Grab	0.0001
Selenium, Total Recoverable, mg/L	Semi Annual	Grab	0.001
Manganese, Total Recoverable, mg/L	Semi Annual	Composite	0.01
Zinc, Total Recoverable, mg/L	Semi Annual	Composite	0.01
Phenols, Total, mg/L	Semi Annual	Grab	0.1
Cyanide, Total, mg/L	Semi Annual	Grab	0.005

Footnotes:
1. Refers to the frequency of observation or measurement.
2. See the definitions in Part V. of the permit.
NA – Not Applicable

2. Instream Monitoring

The permittee is required to conduct upstream and downstream monitoring of the Tongue River for the parameters and at the frequencies listed below.

Instream Monitoring Requirements			
Parameter	Frequency [1]	Sample Type [2]	Minimum Level
Flow, cfs[3]	Daily	Daily average	0.1
pH, SU	Weekly	Instantaneous	0.1
Temperature, deg F	Weekly	Instantaneous	1
Specific Conductivity, µS/cm	Weekly	Instantaneous	10
Total Suspended Solids, mg/L	Monthly	Grab	10
Total Dissolved Solids, mg/L	Weekly	Grab	10
Sodium, mg/L	Monthly	Grab	1
Calcium, mg/L	Monthly	Grab	1
Magnesium, mg/L	Monthly	Grab	1
Sodium Adsorption Ratio, SAR	Monthly	Calculate	0.1
Nitrite + Nitrate, as N, mg/L	Monthly	Grab	0.01
Kjeldahl Nitrogen, Total, as N, mg/L	Monthly	Grab	0.1
Ammonia, as N, mg/L	Monthly	Grab	0.05
Total Nitrogen, mg/L	Monthly	Calculate [4]	0.1
Phosphorous, Total, mg/L	Monthly	Grab	0.001
Arsenic, Total Recoverable, mg/L	Quarterly	Grab	0.001
Mercury, Total Recoverable, mg/L	Quarterly	Grab	0.0001
Radium, Total, pCi/L	Quarterly	Grab	0.1
Aluminum, dissolved, mg/L	Semi Annual	Grab	0.01
Barium, Total Recoverable, mg/L	Semi Annual	Grab	0.01
Boron, mg/L	Semi Annual	Grab	0.01
Cadmium, Total Recoverable, mg/L	Semi Annual	Grab	0.0001
Copper, Total Recoverable, mg/L	Semi Annual	Grab	0.001
Fluoride, mg/L	Semi Annual	Grab	0.05
Iron, Total Recoverable, mg/L	Semi Annual	Grab	0.01
Lead, Total Recoverable, mg/L	Semi Annual	Grab	0.001
Manganese, Total Recoverable, mg/L	Semi Annual	Grab	0.01
Selenium, Total Recoverable, mg/L	Semi Annual	Grab	0.001
Strontium, Total Recoverable, mg/L	Semi Annual	Grab	0.1
Zinc, Total Recoverable, mg/L	Semi Annual	Grab	0.01

Footnotes:
1. Refers to the frequency of observation or measurement.
2. See the definitions in Part V. of the permit.
3. Reported from USGS Gauging Station 06306300 on DWS-A DMR
4. Total nitrogen is sum of Kjeldhl nitrogen and nitrite plus nitrate nitrogen.

3. Nutrient Monitoring

The permittee shall monitor periphyton community in accordance with the approved monitoring plan submitted pursuant to Part I.E and Department's Standard Operating Procedure (SOP - Section 12.0, Revision 0, Date 3/31/99) for Periphyton Composition and Structure (12.1.2.4,) and Standing Crop (12.1.2.3). Sampling shall be conducted annually between July 15 and August 15 for the term of the permit.

The permittee shall submit annual reports to the Department pursuant to Part I.E.3 of this permit.

4. Effluent Diffuser

The permittee shall install effluent diffusers in accordance with "*Supplemental Information for Fidelities Diffuser Outfalls* ", Prepare for Fidelity, By Hydrometrics, Inc., December 2004. The effluent diffusers shall not exceed two thirds of the channel width at low flow. The permittee shall comply with the following conditions:

i) Provide 30 days written notice to the Department in accordance with Part II.D of this permit, prior to installation of the effluent diffusers in the Tongue River.

ii) The permittee shall obtain all necessary permits and comply with applicable rules and regulations regarding stream permitting.

iii) The permittee shall submit as-built plans and specification for the diffuser within 60 days after completion.

iv) The permittee shall limit flows to a maximum of 1,600 gpm until such time the diffusers are installed and operational in the Tongue River.

5. Ground Water Monitoring

The permittee shall have a Department approved ground water monitoring program for all impoundments used to store CBNG wastewater.

For existing impoundments the permittee will be required to submit to the Department, test well siting requirements (Objective #1) for review and approval 30 days after permit issuance. Should test wells or monitoring wells already exist, all data concerning geology, hydrology and baseline water quality must be submitted within the 30-day period.

For new impoundments, the permittee will submit a ground water monitoring plan 90 days prior to construction of the impoundment and are subject to the requirements of Part I.A.3, Ground Water Monitoring Plan, of this permit.

6. Toxicity Reduction Evaluation / Toxicity Identification Evaluation

If toxicity is detected, and it is determined by the Department that a TRE/TIE is necessary, the permittee shall be so notified and shall initiate a TRE/TIE immediately thereafter. The purpose of the TRE/TIE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity. Failure to initiate or conduct an adequate TRE/TIE, or delays in the conduct of such tests shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.C.1 of this permit.

If the TRE/TIE establishes that the toxicity cannot be eliminated, the permittee shall submit a proposed compliance plan to the Department. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Department, this permit may be reopened and modified.

If the TRE/TIE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

i. Submit an alternative control program for compliance with the numerical requirements,

ii. If necessary, provide a modified whole effluent testing protocol subject to Department approval, which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Department, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Department, and/or a modified whole effluent protocol.

Failure to conduct an adequate TRE/TIE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Department, shall not excuse the permittee from meeting the limits contained in Part I.C.1 of this permit.

E. Compliance Schedule

1. Supplemental Effluent Monitoring Plan

Due to the interconnectivity of the collection system for the project, the permittee will be required to conduct supplemental monitoring to characterize the quality of the effluent. The permittee will be required to monitor the effluent at the frequency listed in Part I.D.1, for the term of the permit. The permittee can choose one outfall from the each of the two outfall flow classifications to be a representative of that classification:

Outfall Flow range: 0 - 150 gpm: Outfalls 001, 002, 003, 005, 008, 009, 010, 011, 013 and 014.
Outfall Flow range: >150 gpm: Outfalls 004, 006, 007, 012, and 016.

By March 6, 2006, the permittee shall notify the Department in writing of the representative outfalls and sampling locations. To further characterize the individual coal seams, the permittee will be required to submit sampling and monitoring results required under the ROD for each plan of development.

2. Instream Monitoring Plan

By April 6, 2006, the permittee shall submit a work plan for department review and approval to monitor the quality of the receiving water above and below the all outfalls. The location shall be permanently marked in the field at a distance upstream of the discharge not more that 0.5 miles outside of the area influenced by the discharge. Concurrent down stream monitoring will also be required for the same parameters and frequencies listed in Instream Monitoring table. The location shall be permanently marked immediate adjacent to the downstream edge the most downstream mixing zone. Within 60 days of the effective date of this permit, the permittee shall notify the Department in writing of the exact sample locations (latitude, longitude and physical description) for the instream monitoring.

Based on comments received additional instream monitoring will be required. Additional monitoring will be conducted at the point where the Tongue River re-enters Wyoming, below outfall 014. Monitoring will be required for Specific conductivity (weekly) and SAR (monthly). The permittee will be required to notify the Department in writing of the exact sampling location as required above.

3. Nutrient Monitoring Plan

By April 6, 2006, the permittee shall submit a study plan for department review and approval to assess the periphyton community in accordance with Department's Standard Operating Procedure (SOP - Section 12.0, Revision 0, Date 3/31/99) for Periphyton Composition and Structure (12.1.2.4,) and Standing Crop (12.1.2.3). The permittee will be required to sample three reaches, a reference site upstream of the discharge and one site located immediately downstream of the discharge within the mixing zone (within two river widths), and a suitable location below the mixing zone. This condition is necessary to ensure compliance with the nutrient criteria of ARM 17.30.715(1)(g) and the Department's nonsignificance determination (Part VIII). Sampling shall be conducted annually between July 15 and August 15 for the term of the permit.

The permittee shall prepare an annual report containing all laboratory results, field measurements, and relevant biological metrics for each calendar year. The report shall be submitted, or postmarked no later than the 28th day of the month after that calendar year for which the report is due. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the "Signatory Requirements" (See Part IV.G of this permit), and submitted to the Department in accordance with Part II.D of this permit. The permittee may prepare narrative interpretation of the study in accordance with Section 1.2 of the above reference report. This report does not modify the requirement for submittal of an annual report as described in this paragraph.

4. Ground Water Monitoring Plan

The purpose of monitoring the quality of the ground water at impoundments used for the storage of the waters produced from the extraction of CBNG gas is to ensure the natural quality of the ground water is not impaired by the infiltration of the CBNG produced water. The objectives that must be considered in evaluating the potential for impacts to the quality of the uppermost ground water beneath all CBNG impoundments/ponds will include:

1) Determining the depth to the first ground water and the direction of ground water flow in the immediate vicinity of the proposed impoundment location,
2) Providing current ground water quality and quantity information on the nature and hydrogeologic extent of this shallow ground water zone,
3) Submitting current analytical data on the quality of the CBNG produced water that will be discharged to the impoundment over the life of the impoundment,
4) Monitoring, assessing, and reporting any changes in the quality of the shallow ground water adjacent to the impoundment for the useful life of the impoundment,
5) Increasing monitoring, if the baseline ground water quality in the shallow aquifer is impacted, and
6) Implementing corrective action(s), if any ground water quality standard (ARM 17.30.1006) is exceeded in order to protect the quality of the ground water and maintain the beneficial uses of the original/baseline ground water classification in the first ground water in the area beneath the impoundment(s).

Objective #1 will be achieved by initially drilling, completing, developing, and sampling at least one (1) ground water monitoring well ("test well") in the first ground water encountered. First ground water is determined by observing the rate of recharge into the borehole following drilled/augered penetration of the saturated zone. The rate of recharge for approximately three (3) bore volumes should be less than eight (8) hours. If it appears recharge to the borehole will be greater than eight (8) hours, the hole should be deepened until a saturated zone with an adequate rate of recharge is encountered in which to complete a monitoring/ "test well".

The "test well" must be located adjacent (within 50 feet from the bank of the impoundment embankment) to the proposed impoundment. All available pertinent data should be used to locate this shallow ground water "test well" in the most hydraulically downgradient location of the area proposed for the impoundment. The direction of ground water flow and ground water gradient at the proposed impoundment site may be determined by using existing, nearby (within 1 mile) well information, hydrogeologic maps, subsurface geology maps, and topographic maps (where applicable). If first ground water is encountered at an elevation above any surface water within a one (1) mile radius, the owner/operator must submit a surface water monitoring plan including the parameters listed in Table 6 of the permit. Sampling of the surface water shall be conducted quarterly for the first year.

Prior to drilling the "test well", all information used to arrive at the ground water flow direction and ground water gradient, including an inventory of all springs and seeps within a (1) one-mile radius of the impoundment must be submitted to the DEQ (Water Protection Bureau) for review and approval on topographic map(s) [USGS 1:24,000] delineating the proposed impoundment, the proposed "test well" location, existing springs and seeps, and the direction of shallow ground water flow.

The monitoring well screen should be installed at the top of the first ground water-bearing zone encountered. The screen should extend through the saturated zone with a minimum of five feet of screen in a thinner (possibly coal seam) zone, as compared to installing no more than 20 feet of screen in the upper portion of a thicker saturated zone.

All ground water monitoring wells must be drilled and completed by a licensed monitoring well driller in accordance with the Administrative Rules of Montana (ARM) Title 36, Chapter 21, Subchapters 7 and 8 of the Board of Water Well Contractors. For additional reference see the EPA *Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells*, (3/91). A driller's borehole log/well completion form (Montana DNRC Form No. 603 R2-99) must be submitted to the DEQ within 60 days following completion of a monitoring well.

Objective #2 will initially be accomplished by collecting a ground water sample from the DEQ approved "test well" within 30 days of monitoring well completion, but no sooner than one (1) calendar-week after the actual completion and development of the well. Appropriate sampling protocol must be followed in purging the well prior to sampling and in sample collection, preservation, and in observing the appropriate holding times prior to laboratory analysis, according to "Non-Point Source Water Quality Standard Operating Procedures" (4/95), the *RCRA Technical Enforcement Guidance Document* (TEGD) 9/86. A reference to the approved sample analysis methods is found in ARM 17.30.1007. A copy of the driller's log, borehole lithology log, and ground monitoring well completion

data must be submitted to the DEQ (WPB) within 60 days of the well completion. The initial ground water sample collected from the "test well" must be analyzed in the field for specific conductivity, pH, temperature, and dissolved oxygen (DO). The laboratory analysis of the ground water sample must include the following parameters:

Required Ground Water Monitoring Parameters for Laboratory Analysis			
General Parameters, units	**Anions (mg/L)**	**Cations (mg/L)**	**DissolvedMetals[2] (µg/L)**
pH, s.u. Specific conductivity, µmhos/cm Total Dissolved Solids (TDS) mg/L Total Alkalinity ($CACO_3$), mg/L Sodium Adsorption Ratio (SAR)[1]	Bicarbonate (HCO_3) Carbonate ($CaCO_3$) Chloride, Cl Fluoride, F Sulfate (SO_4)	Calcium, Ca Magnesium, Mg Potassium, K Sodium, Na	Aluminum, Al Barium, Ba Boron, B Cadmium, Cd Copper, Cu Iron, Fe Phosphorous, P Selenium, Se

[1] SAR is a calculated value.
[2]Laboratory analysis will be for dissolved metals according to WQB-7 water Quality standards.

The laboratory analytical data from this ground water sample will provide information to characterize and classify (according to ARM 17.30.1006) the baseline quality of the receiving water (i.e., the first ground water) beneath the proposed impoundment.

Information concerning the nature and hydrogeologic extent of this shallow ground water may be determined by correlating the "test well" to other wells in the area and depicting the location and extent of the saturated zone on a topographic map for DEQ (WPB) review and approval within 60 days from completion of the "test well".

Objective #3 requires characterization (laboratory analysis) of produced CBNG water, as well as specifying the particular coal bed(s) and the depth of the produced waters intended to be discharged to, and contained/stored in the proposed impoundment. If there is no actual CBNG production water available for analysis, a representative water quality sample from the same coal bed(s) located in the general area (within a 2-mile radius) of the proposed impoundment may be satisfactory.

Objective #4 is based on the depth from the lowest point (below ground surface [bgs] elevation) at the bottom of the impoundment, to the first ground water encountered in the "test well".

Case 1: If the depth to the first ground water in the "test well" is less than or equal to 50 feet below the base of the proposed impoundment, a minimum of two (2) additional monitoring wells (1 hydraulically upgradient, 1 hydraulically downgradient) will be required in addition to the "test well" for

a total of three (3) ground water monitoring wells. The additional downgradient well shall be installed cross gradient to the "test well", and 50 feet from the crest of the respective impoundment bank.

Sampling frequency for all three (3) ground water monitoring wells will be monthly for the first (1) year of usage of the impoundment (i.e., discharge to the pond), then quarterly monitoring for the following two (2) years, followed by semi-annual sampling after the first 3 years, for the life of the impoundment (assuming there have been no impacts to the quality of the shallow ground water in the vicinity of the impoundment for all Table I parameters). The ground water monitoring well samples will be analyzed for all of the constituents listed on Table 1 for the life of the impoundment. An impact(s) to the quality of the ground water is discussed in Objective #5.

Case 2: If the depth to the first ground water in the "test well" is 50 to 100 feet below the base of the proposed impoundment, a minimum of two (2) additional monitoring wells (one (1) hydraulically upgradient, one (1) hydraulically downgradient) will be required in addition to the "test well", for a total of three (3) ground water monitoring wells. The additional downgradient well shall be installed hydraulically cross gradient to the "test well", and 50 feet from the crest of the respective impoundment bank.

A quarterly monitoring frequency for all Table I constituents for the first three (3) years of active usage/discharge to the impoundment will be required. Semi-annual monitoring for all Table I parameters will be required thereafter for the life of the impoundment, assuming there have been no impacts to the quality of the shallow ground water in the vicinity of the impoundment. An impact(s) to the quality of the ground water is discussed in Objective #5.

Case #3: If the depth to the first ground water in the "test well" is deeper than 100 feet below the base of the proposed impoundment, the "test well" has been satisfactorily located hydraulically downgradient, and the direction of shallow ground water flow has been adequately documented at the site to ensure the "test well" has been located appropriately. The required sampling frequency will be semi-annual for the "General Parameters, Anions and Cations" listed in Table I, with only a baseline dissolved metals analysis required. An impact(s) to the quality of the ground water is discussed in Objective #5.

All ground water analytical data must be submitted to the DEQ (WPB) within 30 days from the date the analysis is received by the owner/operator.

Objective #5 addresses an impact(s) to the quality of the ground water as evidenced by a 10% or greater exceedance of a baseline parameter concentration(s) in the receiving ground water quality in any of the ground water monitoring wells. The 10% exceedance will prompt a resample by the owner/operator within 72 hours of the receipt of the laboratory results. If the exceedance is confirmed by the resample,

notification must be given to the DEQ (WPB) within 72 hours of the owner/operator receiving the verification sample results, so that at a minimum, the following actions will be facilitated within the proceeding 30 days,

- Installation of additional ground water monitoring wells to delineate the nature and extent of the ground water plume.

- Collection of samples from any surface water in the area of the potential plume migration.

- Increase the ground water monitoring well sampling frequency and/or increase the parameters required for analysis.

Objective #6 will protect the quality of the ground water and maintain the beneficial uses of the original/baseline ground water classification in the first ground water monitored beneath the impoundment(s). If any water quality standard (ARM 17.30.1006) is exceeded due to the discharge of CBNG wastes, the following corrective action(s) shall be required, but will not be limited to,

- The impoundment shall no longer accept CBNG production water and an alternative storage will be required until the source of the impact is identified and eliminated.

- In some cases, the impoundment will be required to be drained and a liner or an alternative CBNG produced water storage option will be required.

- Evidence of recharge to a sub-surface geologic bed/zone/horizon due to the infiltration of produced CBNG water from the impoundment, by visual location at the surface of a seep(s) will require prompt containment of the seep, followed by a laboratory analysis of the discharge (at a minimum for Table 1 parameters), identification of the source of the surface discharge and the sub-surface migration pathway(s), so that the migration route(s) may be plugged (for example, using a slurry-wall boundary), the migration zone breached and sealed prior to the visible seep(s), or an approved alternative measure implemented to eliminate the surface discharge.

5. Discharge Flow Management Plan

The permittee will be required to develop and submit to the Department within 60 days of the effective date of the permit, for review and approval a Discharge Flow Management Plan to address the discharge of produced water during low flow periods. To ensure compliance with permit limits the permittee will develop the plan utilizing the following criteria.

i.) The plan becomes effective whenever the receiving water flow drops below the yearly 7Q10 of 35 cfs.

ii.) When daily stream flow values are less than the annual 7Q10 (35cfs) as recorded at USGS gauging station 06306300 (Tongue River at State Line near Decker), the permittee shall conduct daily instream monitoring downstream of the subject discharges (DWS-A). During these periods, daily monitoring for electrical conductivity will be undertaken instream.

iii.) Dependent upon the daily analysis, the permittee will be required to manage discharge flows to prevent the electrical conductivity in the Tongue River from exceeding the instantaneous maximum standards (ARM 17.30.670). If the measured instream specific conductance exceeds the instantaneous maxima listed in Part I.B., on two consecutive calendar days, the permittee shall cease discharging to the Tongue River.

iv.) In the event the permittee ceases discharge due to these conditions, discharges cannot recommence until such time the receiving water flows reach the yearly 7Q10 value.

v.) The permittee will be required to contact the Department 24 hours prior to any anticipated low flow conditions occurring in the receiving waters. Notification will include date of monitoring initiation and management actions to restrict flow if necessary. Additional notification shall be made to the Department if discharge of produced water ceases to the river. Final notification to the Department must be made prior to recommencing discharges to the river. The Department must approve recommencing discharges under the discharge permit.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

B. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording devices used in obtaining data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured.

C. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Self-Monitoring results will be reported monthly. Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. Whole effluent toxicity (biomonitoring) results must be reported on forms from the most recent version of EPA Region VIII's "Guidance for Whole Effluent Reporting" with copies of the laboratory analysis report. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the "Signatory Requirements" (see Part IV.G of this permit), and submitted to the Department and the Regional Administrator at the following addresses:

(a) Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901
Phone: (406) 444-3080

(b) U.S. Environmental Protection Agency
301 South Park Avenue
Drawer 10096
Helena, Montana 59626
Phone: (406) 441-1123

E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The initials or name(s) of the individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The time analyses were initiated;

5. The initials or name(s) of individual(s) who performed the analyses;

6. References and written procedures, when available, for the analytical techniques or methods used; and

7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

H. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incidents of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:

a. Any noncompliance which may seriously endanger health or the environment;

b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or

c. Any upset which exceeds any effluent limitation in the permit (See Part III.H of this permit, "Upset Conditions").

2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times;

c. The estimated time noncompliance is expected to continue if it has not been corrected; and

d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.

4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

J. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D of this permit are submitted. The reports shall contain the information listed in Part II.I.2 of this permit.

K. Inspection and Entry

The permittee shall allow the head of the Department or the Director, or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department or the Regional Administrator advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine of not more than $50,000 per day of violation, or by imprisonment for not more than 2 years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Any sludges removed from the facility shall be disposed of in accordance with 40 CFR 503, 258 or other applicable rule. EPA and MDEQ shall be notified at least 180 days prior to such disposal taking place.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2 and III.G.3 of this permit.

2. Notice:

   a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".

3. Prohibition of bypass

   a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:

      (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

      (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

      (3) The permittee submitted notices as required under Part III.G.2 of this permit.

   b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III.H.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e. Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under Part II.I of this permit, “Twenty-four Hour Notice of Noncompliance Reporting”; and

   d. The permittee complied with any remedial measures required under Part III.D of this permit, "Duty to Mitigate”.

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

J. Changes in Discharge of Toxic Substances

Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

   a. One hundred micrograms per liter (100 mg/L);

b. Two hundred micrograms per liter (200 mg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 mg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Department in accordance with 40 CFR 122.44(f).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

a. Five hundred micrograms per liter (500 mg/L);

b. One milligram per liter (1 mg/L) for antimony;

c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

d. The level established by the Department in accordance with 40 CFR 122.44(f).

IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for revoking, modifying and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department or the EPA shall be signed and certified.

1. All permit applications shall be signed as follows:

    a. For a corporation: by a responsible corporate officer;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:

a. The authorization is made in writing by a person described above and submitted to the Department; and

b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)

3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document

submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more that $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;

3. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and

4. Required annual and application fees have been paid.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-31-510(3), MCA, or

2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the effluent limits or water management plan.

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.

4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

5. Toxic Pollutants: A toxic standard or prohibition is established under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

6. Toxicity Limitation: Change in the whole effluent protocol, or any other conditions related to the control of toxicants have taken place, or if one or more of the following events have occurred:

a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.

b. The TRE/TIE results indicated that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion.

c. The TRE/TIE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the permit issuing authority agrees that numerical controls are the most appropriate course of action.

d. Following the implementation of numerical controls on toxicants, the permit issuing authority agreed that a modified whole effluent protocol is needed to compensate for those toxicants that are controlled numerically.

e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

V. DEFINITIONS

1. **"Act"** means the Montana Water Quality Act, Title 75, chapter 5, MCA.

2. **"Administrator"** means the administrator of the United States Environmental Protection Agency.

3. **"Acute Toxicity"** occurs when 50 percent or more mortality is observed for either species (See Part I.C of this permit) at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

4. **"Arithmetic Mean" or "Arithmetic Average"** for any set of related values means the summation of the individual values divided by the number of individual values.

5. **"Average Monthly Limitation"** means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

6. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.

7. **"Chronic Toxicity"** means when the survival, growth, or reproduction, as applicable, for either test species, at the effluent dilution(s) designated in this permit (see Part I.C.), is significantly less (at the 95 percent confidence level) than that observed for the control specimens.

8. **"Composite samples"** shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

   a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

   b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

   c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,

   d. Continuous collection of sample, with sample collection rate proportional to flow rate.

9. **"Daily Discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonable represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

10. **"Daily Maximum Limit"** means the maximum allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

11. **"Department"** means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.

12. **"Director"** means the Director of the Montana Department of Environmental Quality.

13. **"EPA"** means the United States Environmental Protection Agency.

14. **"Federal Clean Water Act"** means the federal legislation at 33 USC 1251, *et seq*.

15. **"Grab Sample"** means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.

16. **"Instantaneous Maximum Limit"** means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

17. **"Instantaneous Measurement"**, for monitoring requirements, means a single reading, observation, or measurement.

18. **"Mixing zone"** means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

19. **"Nondegradation"** means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.

20. **“Regional Administrator”** means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.

21. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

23. **“TIE”** means a toxicity identification evaluation.

24. **"TMDL"** means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

25. **“TRE”** means a toxicity reduction evaluation.

26. **"TSS"** means the pollutant parameter total suspended solids.

27. **"Upset"** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.